### **Comparisons of Job Characteristics**

Focus Occupation: Maintenance and Repair Workers, General (49-9042)

**Associated Occupation: Avionics Technicians (49-2091)** 

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

### Knowledge

Similarity of Focus Occupation to Associated Occupation: 36

Focus Occupation: Maintenance and Repair Workers, General (49-9042)

Associated Occupation: Avionics Technicians (49-2091)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Computers and Electronics	8.4	14.7	4.8	<<	Extensive education and/or training may be required	
Engineering and Technology	5.7	13.0	10.3	<	Expanded education and/or training may be required	
Mathematics	9.2	12.3	9.8	<	Expanded education and/or training may be required	
Mechanical	6.8	9.6	19.3	>>	Current knowledge level is likely more than sufficient	
Production and Processing	6.0	9.5	6.5	<<	Extensive education and/or training may be required	
Telecommunications	3.9	6.3	3.5	<<	Extensive education and/or training may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Skills**

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Maintenance and Repair Workers, General (49-9042) Associated Occupation: Avionics Technicians (49-2091)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Repairing	3.4	13.9	12.3	<	A higher skill level may be required
Troubleshooting	4.5	13.8	10.0	<<	Extensive development of skills in this area may be required
Equipment Maintenance	3.5	13.5	12.7	0	Current skill level may be sufficient
Quality Control Analysis	5.9	11.8	9.8	<	A higher skill level may be required
Operation Monitoring	6.6	11.5	8.4	<<	Extensive development of skills in this area may be required

Equipment Selection	3.3	9.1	9.5	0	Current skill level may be sufficient
Installation	1.7	5.4	8.3	>>	Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Abilities**

#### Similarity of Focus Occupation to Associated Occupation: 7

Focus Occupation: Maintenance and Repair Workers, General (49-9042) Associated Occupation: Avionics Technicians (49-2091)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Problem Sensitivity	11.1	13.0	12.7	0	Current ability level may be sufficient	
Information Ordering	9.9	11.8	13.3	>	Current ability level is likely sufficient	
Finger Dexterity	7.6	11.5	9.4	<	Some improvement in abilities may be required	
Visualization	7.5	11.0	11.0	0	Current ability level may be sufficient	
Manual Dexterity	6.5	10.2	11.4	>	Current ability level is likely sufficient	
Control Precision	6.6	9.5	9.5	0	Current ability level may be sufficient	
Visual Color Discrimination	6.4	8.5	8.5	0	Current ability level may be sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of  $O^*NET$  (Occupation Information Network) data.

## **Activities that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 81

Focus Occupation: Maintenance and Repair Workers, General (49-9042) Associated Occupation: Avionics Technicians (49-2091)

Work Activities	Exclusivity of Activity
Fabricate, assemble, or disassemble manufactured products by hand	11
Install electrical fixtures or components	71
Install electronic equipment, components, or systems	62
Install or replace meters, regulators, or related measuring or control devices	66
Install/connect electrical equipment to power circuit	57
Perform safety inspections in industrial, manufacturing or repair setting	32
Read blueprints	10
Read schematics	34
Read technical drawings	7
Repair electronic components, equipment, or systems	74
Repair or adjust measuring or control devices	71
Repair or replace electrical wiring, circuits, fixtures, or equipment	49
Replace electronic components	63
Solder electrical or electronic connections or components	55
Test electrical/electronic wiring, equipment, systems or fixtures	54

Understand service or repair manuals	40
Understand technical operating, service or repair manuals	6
Use electrical or electronic test devices or equipment	40
Use hand or power tools	2
Use knowledge of metric system	39
Use precision tools in electronics repair	71
Use soldering equipment	44
Use voltmeter, ammeter, or ohmmeter	52

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

# **Tools and Technologies that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 83

Focus Occupation: Maintenance and Repair Workers, General (49-9042)
Associated Occupation: Avionics Technicians (49-2091)

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Electrical measuring and testing equipment	7
Forming tools	2
Holding and clamping tools	3
Industry specific software	1
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Measuring and layout tools	3
Power tools	2
Respiratory protection	6
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Viewing and observing instruments and accessories	4
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of  $O^*NET$  (Occupation Information Network) data.